

CLAIMS

What is claimed is:

5 1. A calibration method of an image scanning system having an image reading device for reading image information, said image reading device having at least a linear sensor consisting of a plurality of photo-sensing elements, said calibration method comprising:

10 reading image information from a calibration plate having a plurality of pixels at least in a row, wherein a sensing value of each said photo-sensing element of said image reading device corresponds to one of said pixels;

15 determining a base value in accordance with said sensing values of said calibration plate;

20 computing respective differences between said adjacent sensing values;

25 storing said base value and said respective differences; and

30 calibrating image information of an object captured by said image scanning system, wherein said base value is added to a first sensing value of the image information of said object and each sequential sensing value of the image information of said object is added by one of said respective differences corresponding thereto.

2. The calibration method of claim 1, wherein said base value is a minimum value among said sensing values of said calibration plate.

3. The calibration method of claim 1, wherein said base value is a medium value of said sensing values of said calibration plate.

4. The calibration method of claim 1, wherein storage bits of one of said respective differences is determined depending on a distribution range of said respective differences.

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5. The calibration method of claim 1, wherein the calibration of the image information of said object is executed by means of an additive circuit and a compensating/computing circuit.

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6. The calibration method of claim 1, wherein said calibration plate is either of white calibration plate and black calibration plate.

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7. A calibration method of an image scanning system having an image reading device for reading image information, said image reading device having at least a linear sensor consisting of a plurality of photo-sensing elements, said calibration method comprising:

20 reading image information from a calibration plate having a plurality of pixels at least in a row, wherein a sensing value of each said photo-sensing element of said image reading device corresponds to one of said pixels;

determining a base value in accordance with said sensing values of said calibration plate;

computing a difference between said base value and each of said sensing values of said calibration plate;

25 storing said base value and said differences; and

calibrating image information of an object captured by said image scanning system, wherein each sensing value of the image information of said object is added by said base value and one of said differences

corresponding thereto.

8. The calibration method of claim 7, wherein said base value is a minimum value among said sensing values of said calibration plate.

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9. The calibration method of claim 7, wherein said base value is a medium value of said sensing values of said calibration plate.

10. The calibration method of claim 7, wherein storage bits of one of said differences is determined depending on a distribution range of said differences.

11. The calibration method of claim 7, wherein the calibration of the image information of said object is executed by means of an additive circuit and a compensating/computing circuit.

15. The calibration method of claim 7, wherein said calibration plate is either of white calibration plate and black calibration plate.